

PTO/SB/21 (6/98)
Approved for use through 9/30/2000. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM

(To be used for all correspondence after initial filing)

Application No.	09/920,789	Patent No. 6,907,433 B2
Filing Date	1 August 2001	Issue Date: 14 June 2005
First Named Inventor	Yaoping Wang	
Group Art Unit	2172	
Examiner Name	Joon H. Hwang	
Attorney Docket No.	OR02-13401	

Total Number of Pages in this Submission:

ENCLOSURES (check all that apply)

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> Fee Transmittal Form
<input checked="" type="checkbox"/> Fee attached
<input type="checkbox"/> Amendment/Response
<input type="checkbox"/> After Final
<input type="checkbox"/> Affidavit/Declaration(s)
<input type="checkbox"/> Extension of Time Request
<input type="checkbox"/> Express Abandonment Request
<input type="checkbox"/> Information Disclosure Statement
<input type="checkbox"/> Certified Copy of Priority Document(s)
<input type="checkbox"/> Response to Missing Parts Notice/Incomplete Application
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Assignment Papers for an application
<input type="checkbox"/> Drawing(s)
<input type="checkbox"/> Licensing-related Papers
<input checked="" type="checkbox"/> Petition
<input type="checkbox"/> Petition to Convert to a Provisional Application
<input type="checkbox"/> Power of Attorney by Assignee, with Revocation of Former Powers
<input type="checkbox"/> Change of Correspondence Address
<input type="checkbox"/> Terminal Disclaimer
<input type="checkbox"/> Small Entity Statement
<input type="checkbox"/> Request for Refund | <input type="checkbox"/> After-Allowance Communication to Group
<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input checked="" type="checkbox"/> Additional Enclosure(s):
<input checked="" type="checkbox"/> Return Receipt Postcard
<input checked="" type="checkbox"/> Check for \$ 230
<input checked="" type="checkbox"/> Certificate of Correction
<input checked="" type="checkbox"/> Copy of Notice of Recordation of Assignment document
<input checked="" type="checkbox"/> Copy of first page of issued patent number US 6,907,433, B2 |
|--|---|---|

Remarks:

SIGNATURE OF APPLICANT, ATTORNEY OR AGENT

Name	A. Richard Park (Registration No. 41,241)	Date	01 July 2005
Signature		Telephone	530-759-1661
Address	2820 Fifth Street, Davis, CA 95616	Facsimile	530-759-1665

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the U. S. Postal Service as ☐ Express Mail (No. US) or ☒ First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313 on: January 8, 2004

Type or Printed Name	Tanya Parker	Signature	
----------------------	--------------	-----------	--

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**FEE TRANSMITTAL
for FY 2003**

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$)**230.00**

Complete if Known		
Application Number	09/920,789	Patent No. 6,907,433 B2
Filing Date	1 August 2001	Issue Date 4 Jun 2005
First Named Inventor	Yaoping Wang	
Examiner Name	Joon H. Hwang	
Group Art Unit	2172	
Attorney Docket No.	OR02-13401	

OFFICE OF PETITIONS**METHOD OF PAYMENT (check one)**

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayment to:

Deposit Account Number: 50-1003

Deposit Account Name: Park, Vaughan & Fleming LLP

☒ Charge any Additional Fee Required Under 37 CFR 1.16 and 1.17

☐ Applicant claims small entity status. See 37 CFR 1.27

2. ☒ Payment Enclosed:

☒ Check ☐ Credit card ☐ Money ☐ Other Order

FEE CALCULATION**1. BASIC FILING FEE**

Large Entity	Small Entity	Fee	Fee	Fee Description	Fee Paid
Code (\$)	Code (\$)				
1001 750	2001 375			Utility filing fee	
1002 330	2002 165			Design filing fee	
1003 520	2003 260			Plant filing fee	
1004 750	2004 375			Reissue filing fee	
1005 160	2005 80			Provisional filing fee	

SUBTOTAL (1) (\$)**0****2. EXTRA CLAIM FEES**

Total Claims: 33 -33**= 00 X Fee from below Fee Paid

Independent Claims: 6 -6**= 0 X Fee Paid

Multiple Dependent: Fee Paid

**or number previously paid, if greater; For Reissues, see below

Large Entity	Small Entity	Fee	Fee	Fee Description
Code (\$)	Code (\$)			
1202 18	2202 9			Claims in excess of 20
1201 84	2201 42			Independent claims in excess of 3
1203 280	2203 140			Multiple dependent claim
1204 84	2204 42			** Reissue independent claims over original patent
1205 18	2205 9			** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)**0****FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet.	
1053 130	1053 130	Non-English specification	
1812 2520	1812 2520	Request for <i>ex parte</i> reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1840*	1805 1840*	Requesting publication of SIR after Examiner action	
1251 110	2255 55	Extension for reply within first month	
1252 410	2252 205	Extension for reply within second month	
1253 930	2253 465	Extension for reply within third month	
1254 1450	2354 725	Extension for reply within fourth month	
1255 1970	2255 985	Extension for reply within fifth month	
1401 320	2401 160	Notice of Appeal	
1402 320	2402 160	Filing a brief in support of an appeal	
1403 280	2403 140	Request for oral hearing	
1451 1510	1451 1510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1300	2453 650	Petition to revive - unintentional	
1501 1300	2501 650	Utility issue fee (or reissue)	
1502 470	2502 235	Design issue fee	
1503 630	2503 315	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	130
1807 50	1807 50	Processing fee for provisional applications	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 750	2809 375	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 750	2810 375	For each additional invention to be examined (37 CFR 1.129(b))	
1801 750	2801 375	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	
Other fee (specify) 1811: Certificate of Correction			100

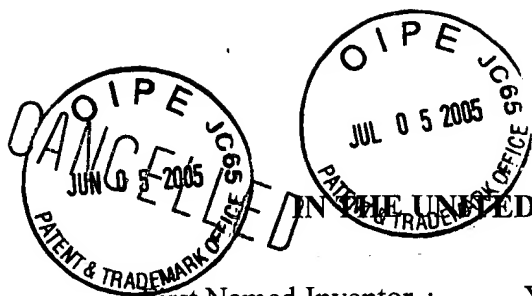
* Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)**230****SUBMITTED BY**

Name (Print/Type)			Complete (if applicable)	
A. Richard Park			Registration No. (Attorney/Agent)	41,241
Signature			Telephone	530-759-1661
			Date	01 July 2005

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information & authorization on PTO-2038.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor : Yaoping Wang
Application No. : 09/920,789
Filed : 1 August 2001
Patent No. : 6,907,433 B2
Issued : 14 June 2005
Docket : OR02-13401
Title : System and Method for Managing Object to Relational One-to-Many Mapping
Group/Art Unit : 2172
Examiner : Pierre M. Vital

RECEIVED

JUL 18 2005

OFFICE OF PETITIONS

PETITION TO CORRECT ASSIGNEE

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant hereby petitions for the correction of the Assignee name and residence data as submitted with the issue fee transmittal for U.S. Patent No. 6,907,433 B2. The correct name and residence data are as follows (and match the information recorded at reel/frame 013820/0707 on 10 March 2003):

OIC Acquisition I Corporation

07/07/2005 HTECKLU1 00000013 6907433

Redwood Shores, CA

02 FC:1464

130.00 OP

Enclosed is a Certificate of Correction regarding this correction. Payment is enclosed in the amount of \$230 for this petition and the Certificate of Correction.

07/07/2005 HTECKLU1 00000013 6907433

01 FC:1811

100.00 OP

Respectfully submitted,

Date: 01 July 2005

By:

A. Richard Park
A. Richard Park

41,241

(Registration No.)

Park, Vaughan & Fleming LLP
2820 Fifth Street
Davis, CA 95616
(530) 759-1661: voice
(530) 759-1665: facsimile

(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO : 6,907,433 B2

DATED : 14 June 2005

INVENTOR(S): Wang, et al.

It is certified that an error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Assignee: **OIC Acquisition I Corporation**
Redwood Shores, CA (US)

MAILING ADDRESS OF SENDER:

A. Richard Park
Park, Vaughan & Fleming LLP
2820 Fifth Street
Davis, CA 95616

PATENT NO: 6,907,433 B2

Burden Hour Statement: This form is estimated to take 1.0 hour to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Alexandria, VA 22313. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Alexandria, VA 22313.

RECEIVED

JUL 18 2005

JULY 24, 2003

PTAS

OFFICE OF PETITIONS
Under Secretary of Commerce for Intellectual Property and
Director of the United States Patent and Trademark Office
Washington, DC 20231
www.uspto.gov

PARK, VAUGHAN & FLEMING LLP
A. RICHARD PARK
508 SECOND STREET, SUITE 201
DAVIS, CA 95616



102387896A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 03/10/2003

REEL/FRAME: 013820/0707

NUMBER OF PAGES: 5

BRIEF: CORRECTIVE ASSIGNMENT TO CORRECT THE ASSIGNEE ADDRESS PREVIOUSLY RECORDED ON REEL 013055 FRAME 0327.

ASSIGNOR:

WANG, YAOPING

DOC DATE: 06/12/2002

ASSIGNOR:

SUTHERLAND, JAMES BRYCE

DOC DATE: 06/12/2002

ASSIGNEE:

~~ORACLE ACQUISITION CORPORATION~~

~~500 ORACLE PARKWAY~~

~~REDWOOD SHORES, CALIFORNIA 94065~~

SERIAL NUMBER: 09920789

FILING DATE: 08/01/2001

PATENT NUMBER:

ISSUE DATE:

LAZENA MARTIN, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

JUL 23 2003



US006907433B2

(12) **United States Patent**
Wang et al.

(10) **Patent No.:** US 6,907,433 B2
(45) **Date of Patent:** Jun. 14, 2005

(54) **SYSTEM AND METHOD FOR MANAGING OBJECT TO RELATIONAL ONE-TO-MANY MAPPING**

(75) **Inventors:** Yaoping Wang, Ottawa (CA); James Bryce Sutherland, Ottawa (CA)

(73) **Assignee:** Oracle International Corp., Redwood Shores, CA (US)

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 603 days.

(21) **Appl. No.:** 09/920,789

(22) **Filed:** Aug. 1, 2001

(65) **Prior Publication Data**

US 2003/0028545 A1 Feb. 6, 2003

(51) **Int. Cl.⁷** G06F 17/30

(52) **U.S. Cl.** 707/104.1; 707/103 R;
707/101

(58) **Field of Search** 707/100-104.1,
707/1-10, 200-206

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,499,371 A * 3/1996 Henninger et al. 707/102

5,560,014 A * 9/1996 Imamura 717/108
5,615,362 A 3/1997 Jensen et al. 395/614
5,706,506 A 1/1998 Jensen et al. 395/614
5,799,309 A * 8/1998 Srinivasan 707/102
6,078,926 A 6/2000 Jensen et al. 707/103
6,101,502 A 8/2000 Heubner et al. 707/103
6,385,618 B1 * 5/2002 Ng et al. 707/103 Y

* cited by examiner

Primary Examiner—Jean M. Corrielus

Assistant Examiner—Joon Hwan Hwang

(74) *Attorney, Agent, or Firm*—Park, Vaughan & Fleming LLP

(57) **ABSTRACT**

Instructions are generated to manipulate target objects and relationships in a relational database when a source object having a one-to-many relationship of privately owned type with the target objects is manipulated. To generate instructions, mapping meta-data is used which contains information as to how object classes of the object model map to tables in the database and how relationships map to foreign keys.

12 Claims, 6 Drawing Sheets

